



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/675,953

10/02/2003

Soo-Hong Park

Q76844

5900

23373 7590 11/28/2007
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

KEEFER, MICHAEL E

ART UNIT

PAPER NUMBER

2154

MAIL DATE

DELIVERY MODE

11/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/675,953

Applicant(s)

PARK, SOO-HONG

Examiner

Michael E. Keefer

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed 8/26/2007 and entered upon the filing of a RCE on 9/24/2007.

Specification

2. The amendment filed 9/24/2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the deletion of carrier waves from the specification is new matter by deletion..

Applicant is required to cancel the new matter in the reply to this Office Action.

The examiner suggests that the paragraph identifying "computer readable recording media" (paragraph 60) be amended to state that the data structure of an address system ... can also be embodied on computer readable recording media or transmission media. Then the part of paragraph 60 that was deleted can be re-added to the end of the paragraph as Transmission media includes carrier waves If applicant has any questions about the Examiner's suggestions, the Examiner invites applicant to contact the Examiner for clarification.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140

Art Unit: 2154

F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 5 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 4 of copending Application No. 10/664028. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 and 4 of '028 disclose all the limitations of claims 1 and 5 of the instant application except where in the interface ID area the device ID is placed. The exact placement of the device ID in a specific area of the interface ID area is a matter of routine experimentation and design choice produces predictable results and would be obvious to one of ordinary skill in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1 and 5 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3, 6, and 8 of copending Application No. 10/746234. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 3, 6, and 8 of '234

disclose all the limitations of claims 1 and 5 of the instant application except where in the interface ID area the device ID is placed. The exact placement of the device ID in a specific area of the interface ID area is a matter of routine experimentation and design choice produces predictable results and would be obvious to one of ordinary skill in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitations added to claims 1 and 5 "storing said identified devices in a memory" is not supported by the disclosure.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 5-6 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The Examiner notes that currently, the computer readable storage medium includes carrier waves. However, if the above suggested amendments to paragraph 60 of the specification are made to clearly state that only statutory subject matter is defined by the computer readable storage medium, this rejection will be overcome.

Claim 5 recites a computer readable medium upon which a data structure is formed. This is merely non-functional descriptive material. An address encoded on a storage media does not perform any actions so as to put it in a statutory category of invention.

Claim 6 does not cure the deficiencies of claim 5 and thus is rejected for the same.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hinden et al. (RFC 2373 "IP Version 6 Addressing Architecture"), hereafter Hinden in view of Itakura (US 2003/0060285).

Regarding **claim 1**, Hinden discloses:

A method of identifying devices using an IPv6 address, the method comprising:

identifying the devices using device ID information for identifying the types of devices recorded in an unused area, excluding a bit area used as a company ID area of an interface ID area, using an EUI-64 ID format. (see page 19, the first figure on the page discloses using the first 24 bits as a company ID area, as described below the figure "where "c" are the bits of the assigned company_id; note that the last 40 bits are marked with an "m" which is a manufacturer selected extension identifier that the manufacturer can use to identify a specific device.)

Regarding **claim 2 and as applied to claim 1**, Hinden discloses:

further comprising identifying the devices using unique numbers assigned to the devices recorded in a serial number area, as well as the device ID information. (Page 21 discloses that in a local network the Node Serial Number may be used as part of the interface identifier.)

Regarding **claim 3 and as applied to claim 1**, Hinden discloses:

wherein the bit area comprises a U-bit area and a G-bit area. (Note that in the first figure on page 19 there is a g bit in the first 16 bits of the figure, and that the '0' bit in the figure is the universal or U-bit.)

Regarding **claim 4 and as applied to claim 1**, Hinden discloses:

wherein the company ID area identifies manufacturers of the devices. (the 'c' bits in the first figure of page 19 are "company_id" bits that are assigned by IEEE to manufacturers of devices.)

Regarding **claim 5**, Hinden discloses:

A computer readable recording medium on which a data structure formed according to an IPv6 address for identifying devices is recorded (it is inherent that these addresses must be recorded on a computer readable medium in a data structure), wherein the data structure includes:

a network ID area for identifying networks to which the devices are connected and an interface ID area for identifying addresses of the devices on the networks, (see page 8, the first figure on the page, the subnet prefix is a network ID area)

where the interface ID area comprises a company ID area for identifying manufacturers of the devices and a serial number area for identifying unique numbers assigned to the devices, and (see page 8, the figure at the bottom of the page discloses a company ID area, the remainder of the 64 bits of the interface ID are reserved for manufacturer specified identification as shown on page 19 in the first figure. As disclosed on page 21, the node serial number may be used as all or part of the extension identifier.)

where the interface ID area comprises a bit area and a device ID area for identifying types of devices, excluding the bit area. (the bit area is disclosed by the u and g bits in the figure at the bottom of page 8, the device ID area is noted by the first figure on page 19 with 'm', representing the extension identifier.)

Regarding **claim 6 and as applied to claim 5**, Hinden discloses:

Art Unit: 2154

wherein the bit area comprises a U-bit area and a G-bit area. (Note that in the first figure on page 19 there is a g bit in the first 16 bits of the figure, and that the '0' bit in the figure is the universal or U-bit.)

Hinden discloses all the limitations of claims 1-6 except for the types of devices being identified by an identifier in the company ID part of the field.

The general concept of identifying the type of device using data in the company id field is well known in the art as taught by Itakura. (See at least [0025])

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Hinden with the general concept of identifying the type of device using data in the company id field as taught by Itakura.

5. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hinden in view of Marttinen et al. (US 6222853), hereafter Marttinen.

Regarding **claims 1-3 and 4-5**, Hinden discloses an interface ID having a company ID area and serial number area having an EUI-64 ID format according to an IPv6 address system and using the serial number to identify the device. See page 19, the first figure and page 21, first and second paragraphs which state that the manufacturer id area (i.e. the area labeled 'm') may be used as an extension identifier (as taught on page 21, this identifier can be a serial number, making the 'm' bit area a serial number area).

Hinden discloses all the limitations of claims 1-6 except for a device ID area recorded in part of the company ID area.

The general concept of a device ID in an address area is well known in the art as taught by Marttinen. (Fig. 3a and 3b teach including a device ID type for identifying the type of a device in an address structure)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the addressing format of Hinden with The general concept of a device ID in an address area as taught by Marttinen in order to be able to quickly route packets based off of the type of device.

Hinden and Marttinen teach all the limitations of claims 1-6 except for the exact placement of the device ID area within the IPv6 EUI-64.

The exact placement of the device ID area within an address field is the subject of routine experimentation and design choice, and yields no unpredictable results, as both the IPv6 address performs its usual function (i.e. allowing packets to be routed on IPv6 networks) and the device ID area performs its usual function (i.e. allowing a device type to be identified based off of a field in its address) therefore it would have been obvious to one of ordinary skill in the art to place the device ID area in any part of the IPv6 interface address structure. This reasoning is supported by *KSR International Co. v. Teleflex Inc.*, 550 U.S.--, 82 USPQ2d 1385 (2007).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael E. Keefer whose telephone number is (571) 270-1591. The examiner can normally be reached on Monday through Friday 9am-5pm.

Art Unit: 2154

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MEK 11/26/2007